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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/597,411	07/25/2006	Paul Ullmann	AT040006	1736

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EXAMINER
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FAULK, DEVONA E

ART UNIT	PAPER NUMBER
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2615

MAIL DATE	DELIVERY MODE
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09/03/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/597,411	<b>Applicant(s)</b> ULLMANN, PAUL	
	<b>Examiner</b> DEVONA E. FAULK	<b>Art Unit</b> 2615	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 03 June 2008.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,2,5,8-10,12-14 and 19 is/are rejected.
- 7) ☒ Claim(s) 3,4,6,7,11 and 15-18 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 6/3/08 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Claim Objections***

1. Claims 3,4,6,7,11,15-18 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

### ***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:  
  
The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
2. Regarding claim 2, the term "preferably" renders the claim indefinite because it is unclear whether the limitations following the phrase are part of the claimed invention.  
  
See MPEP § 2173.05(d).
3. Regarding claims 10 and 11, the phrase "for example" renders the claim indefinite because it is unclear whether the limitation(s) following the phrase are part of the claimed invention. See MPEP § 2173.05(d).
4. Regarding claims 10 and 11, the phrase "such as" renders the claim indefinite because it is unclear whether the limitations following the phrase are part of the claimed invention. See MPEP § 2173.05(d). Since "for example" and "such as" are indefinite and it is unclear as to whether the limitations following the phrases are part of the claimed invention, the examiner has interpreted claim 10 as reciting "wherein the audio/video system is designed to prepare a user profile by recording user actions".

***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1,8,14,19 is rejected under 35 U.S.C. 102(b) as being anticipated by Evoy (US 5,758,173).

Regarding claim 1, Evoy discloses an audio/video system (computing system; abstract) having an audio reproduction device (speaker 46, Figure 4) for reproduction of audio signals via at least one loudspeaker unit (speaker 46, Figure 4), and having ultrasonic signal-generating means for generating ultrasonic signals (generator ,44, Figure 4; column 3, lines 36-43), wherein the ultrasonic signal-generating means are designed to emit the ultrasonic signals (column 3, lines 36-43) to at least one of the loudspeaker units (Figure 4), which at least one of the loudspeaker units is designed to emit the ultrasonic signals (Figure 4; column 3, lines 44-50), and having ultrasonic signal- receiving means (microphone 47, Figure 4, column 3, lines 52-62) for receiving ultrasonic signals (column 3, lines 52-62)), and having ultrasonic signal-processing means (48-51 , Figure 4) for processing ultrasonic signals received by the ultrasonic signal-receiving means , wherein the ultrasonic signal-processing means are designed automatically to detect the presence of at least one person from changes in the received ultrasonic signals and to emit a

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detection signal (column 3, lines 10-22 and 52-62; detection signal is the signal output by the comparison circuit 51, Figure 4).

Regarding claim 8, Evoy discloses that the ultrasonic receiving means is in the form of a microphone (column 3, lines 52-52).

All elements of claims 14,19 are comprehended by the rejection of claim 1 (See Evoy as applied to claim 1 above).

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Evoy (US 5,758,173) in view of Zeng (US 6,469,956) .

Regarding claim 2, Evoy teaches of detecting echo patterns of the ultrasonic signals received by the ultrasonic signal-receiving means (column 3, lines 28-35 teaches that ultrasound waves generated by speakers 32 and 33 are detected by microphone 31.

When a user places his hands over keyboard 12, this reflections a larger amount of the ultrasound transmission into microphone 31. By monitoring when the ultrasound waves received by microphone 31 increase in strength, it is possible to determine that the user's hands are positioned over keyboard 12), and of the ultrasonic receiving means receiving ultrasonic signals over a pre-defined period of time (column 3, lines 28-35).

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It is obvious, per column 3, lines 28-35, that the echo patterns are compared in order to detect the presence of at least one person from changes in the echo pattern.

Evoy fails to explicitly disclose that the ultrasonic signals are single sequences. Zeng teaches of a sensor that receives the ultrasonic signals as single sequences (column 3, lines 50-54; column 4, lines 36-45). It would have been obvious to modify Evoy so that the microphone receives the ultrasonic signals as single sequences for the benefit of making detection easier.

5. Claims 5,12 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Evoy (US 5,758,173) in view of Hermans (US 3,781,859).

Regarding claim 5, Evoy discloses an ultrasonic processing means. Evoy teaches that a user places his hands over keyboard 12, this reflections a larger amount of the ultrasound transmission into microphone 31. By monitoring when the ultrasound waves received by microphone 31 increase in strength, it is possible to determine that the user's hands are positioned over keyboard 12), and of the ultrasonic receiving means receiving ultrasonic signals over a pre-defined period of time (column 3, lines 28-35).

Evoy fails to explicitly disclose of determining frequency shifts from the ultrasonic signals in order to detect the presence of a person from the frequency shifts. This concept is well known in the art as taught by Hermans. Hermans discloses determining frequency shifts and determining the presence of a human based on the frequency shifts (abstract). It would have been obvious to modify Evoy to determine frequency shifting and using the determination to detect the presence of a human for the benefit of providing an alternative method of detecting the presence of a human.

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Regarding claim 12, Evoy discloses an ultrasonic signal processing means. Evoy discloses a computing system and detecting when a hand is present over the keyboard. Evoy fails to disclose that the ultrasonic processing means is designed to activate an alarm. Hermans discloses an ultrasonic processing means is designed to activate an alarm (abstract). It would have been obvious to modify Evoy so that an alarm can be activated when a person is detected to be a deterrent against burglary.

Regarding claim 13, Evoy as modified by Hermans discloses activating an alarm based on detection signals and that the alarm is a police call (Hermans, column 2, lines 33-39). Evoy as modified fails to explicitly disclose that the transmitting the detected signals via a telecommunications network to an alarm station. The examiner takes official notice that alarm systems that transmit a detection signal to a security company or police is well known in the art. It would have been obvious to modify Evoy as modified so that the detection signals are sent to a security or police station so that there will be quick response to the detection of an intruder.

6. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Evoy (US 5,758,173) in view of Zimmerman et al. (US 4,988,981) .

Regarding claim 9, Evoy fails to disclose that the speaker is a tweeter loudspeaker. Zimmerman discloses a tweeter loudspeaker (column 6, lines 1-7) . It would have been obvious to modify Evoy so that the speaker is a tweeter speaker for the benefit of being able to output a high frequency signal.

7. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Evoy (US 5,758,173) in view of Dempsey (US 7,050,078) .

Regarding claim 10, Evoy discloses an audio/video system and teaches of detecting a user's actions (detection when a user's hands are present ; column 1, lines 35-40). Evoy fails to disclose that the audio/video system is designed to prepare a user profile by recording the user actions. Dempski teaches of preparing a user profile by recording the user actions (column 8, lines 7-18). It would have been obvious to modify Evoy by preparing a user profile by recording the user's actions for the benefit of automatic recognition of a user.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DEVONA E. FAULK whose telephone number is (571)272-7515. The examiner can normally be reached on 8 am - 5 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vivian Chin can be reached on 571-272-7848. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.



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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Devona E. Faulk/  
Examiner, Art Unit 2615